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ABSTRACT

The paradigm outlined in this paper is designed to aid in writing scenarios of alternative futures. Specifically the author outlines major conditions and processes in social life which should provide a scheme to be used in constructing or in criticizing scenarios developed by other methods. This scheme should provide assistance in several ways: 1) it should make forgetting or ignoring major actors in the social system less likely; 2) make the steps in the movement from one time to another more explicit; 3) increase the probability of explicit recognition of alternative developments; and, 4) assist in making the scenarios more plausible and more likely confirmed by future developments. The paradigm itself consists of four major parts: 1) the bases and varieties of the social units; 2) the fundamental social process among and within the social units; 3) the basic conditions of the units; and, 4) the interrelations of processes and conditions and variations in the outcome of different processes. (Author/AWW)

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TOWARD A SOCIAL SCIENCE PARADIGM  
FOR THINKING ABOUT FUTURES

by

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The paradigm which is outlined in this paper is designed to aid in writing scenarios of alternative futures. This paper will not provide a method for the creation of scenarios. If there were a general social science theory and we had comprehensive information about current conditions and rates of change, we could construct a full panoply of possible futures and even have some idea of the relative likelihood of different futures actually emerging. We do not have such a theory and it is not likely to be created within the foreseeable future. Nevertheless, systematic attention to the social sciences can assist in making up alternative futures. In this paper, and related ones, I will try to indicate how this may be accomplished.

In this paper, I will outline major conditions and processes in social life. Related papers will go into some of these in more detail. This outline of major conditions and processes should provide a scheme to be used in constructing or in criticizing scenarios developed by other methods. The elaboration of this approach, over many years, might eventuate in the simulation of futures and the use of econometric-like techniques for a social system such as the American society. The aims of this paper are more limited: to assist in the construction and critique of scenarios.

The scheme should provide such assistance in several ways. First, it should make forgetting or ignoring major actors in the social system less likely. In other words, the scheme can be used by someone thinking about the future to review a wide range of sets of people who should be considered in constructing a futures scenario

and the variety of ways these sets of people may affect each other. Secondly, in doing this, the steps in the movement from one time to another will be made more explicit; the scheme should facilitate the construction of scenarios through sequential stages. Thirdly, by providing a range of processes and units, the alternative developments are more likely to be explicitly recognized. As someone contemplates the future and thinks that a particular path will be followed, the consideration of the alternative directions of movement can be more systematic. Finally, the scheme should help in making the scenarios be more plausible and more likely to be confirmed by future developments. These aids in the construction and criticism of scenarios should also apply to policy makers considering the implications of one course of action rather than another.

In this scheme the society is the major focus of analysis. Nevertheless, the paradigm devotes much attention to the units and sub-units within and across societal boundaries. The source of change is seen in the interaction among these units and the altering conditions created by such interactions. Attention is also directed at the society (or any other unit) as a totality and in relationship to its environment. This kind of paradigm then, is particularly relevant for the construction of scenarios by incremental steps. It is applicable for futures construction in which the interplay of major components is emphasized as well as in which the implications of a major trend or theme are followed out.

The paradigm consists of four major parts. (1) The bases and varieties of the social units which may be the components of the analysis will be discussed. (2) The fundamental social

process among and within social units will be examined. (3) The basic conditions of the units will be analyzed. (4) The inter-relations of processes and conditions and variations in the outcome of different processes will be discussed.

I

SOCIAL UNITS

In thinking about the future, it is important not to simply accept the existing conventional units as fixed. The people in a society may be divided into innumerable categories. Which ones are significant changes over time. For example, the importance of regions, ethnicity, income differences, place of residence, occupations, even age and sex, have varied as significant divisions in different societies and over time within the American society. Throughout this paper we will discuss what affects the significance of some distinctions rather than others. At this point, I want to make some observations about the kinds of distinctions which may be made, the variety of units so created, and ways to bring to mind a full range of possible units to be considered in thinking about the future.

A. Types and bases of distinctions.

It might seem that the only criterion for an important distinction in a social system is that the participants regard them as important. But in trying to think about the future, we would also like to consider distinctions which the participants do not yet recognize as important and which will come to affect them greatly. So I will also note the distinctions which a social analysis might make, after discussing those which participants in the social system make.

Several kinds of social processes, as we shall discuss in the next section, involve social interaction. In social interaction each interacting unit takes into account how the other unit is likely

to react to its conduct in deciding how to act. For this to occur there must be actors. That is, the units must have some conception of themselves as entities and of other units as also having some collective identity. At this point in the discussion, then, we must consider the various ways in which such awareness may be assessed and what criteria may be used in delimiting a social unit.

The assessment or manifestation of membership in a given social unit may depend upon the members having the belief that they share whatever the defining criteria of membership may be. More usually it depends upon the actions of the social unit, as a social entity. In that case the existence of a collective identity is inferred from the action. The members themselves or the non-members may make the inference. This is related to the other major way in which the identity of a social unit is manifested--by the words or deeds of spokesmen--persons who purport to represent the social unit. The spokesmen proclaim the boundaries of the unit and who the members are. There is an important issue that this raises: are the claims of the spokesman recognized and accepted by the constituency claimed by the spokesman and are they recognized and accepted by those who are not the constituency--the adversaries, allies, and audience? In short, whatever the way may be to assess or manifest the existence of the social unit, it can depend upon either the members themselves or the non-members. In actuality, the two reinforce and legitimate each other. But there is room for ambiguity here. That ambiguity is a source of change and an outgrowth of not-yet-recognized change.

The criteria which could be used by members and non-members in drawing boundaries for the social units are infinite. Any characteristic possessed by some set of people may be used as a basis

for a distinction. One might point to characteristics like prestige, power, authority, friendship, or kinship. Clearly, these involve social relationships. One cannot have social power except in relationship to people over whom the power is held. Other characteristics might seem to reside in persons independently of any social relationship. Examples might be: where they live, what their age, race, sex, or marital status, the kind of personality they have, or what language they speak. Even these characteristics, however, depend upon social relations and social definitions if they are to be used in distinguishing social units. This is so for several noteworthy reasons.

First, the characteristic must be socially discerned; for some characteristics this may seem almost unavoidable, but for others they are meaningful only in particular social contexts. For example, indicators of race may be noticed and made significant or relatively ignored. Even assuming that some characteristic is taken to be significant, how it is used to distinguish one set of persons from another is not inherent in the characteristic. For one thing, most characteristics are continuous variables and the divisions along any such dimension has an arbitrary quality. Social conventions mark age grades and make some cutting points more significant than others. This touches upon another consideration. The meaning of being on one side of a dividing line along any dimension depends upon the meaning of being on the other side. Youth is defined in contrast to middle-age and middle-age to elderly. Masculine is defined by reference to feminine and vice versa. American is defined in comparison to non-American. The implications of these considerations will be discussed in later points of the paper. Finally, which characteristics take on social significance depends upon the issues arising

in the larger social unit. For example, if questions about U.S. foreign policy become salient in the U.S. or questions about sex education in local schools become matters of great attention in a community, personal values or personality characteristics may appear as a somewhat more important factor dividing people into contending groups than is the case for issues more traditionally related to economic interests.

Having noted the importance of the participants' definitions and awareness of characteristics in delimiting social units, we need to recognize the utility and possibility of an observer or social analyst discerning what characteristics and dimensions will become important to the participants. It should be obvious that if a social analyst can anticipate which social units will increase and which decrease in salience to participants, he will have an important insight into the possibilities of the future. I can suggest a few guides to this endeavor.

A pre-condition for the development of a collective identity is the existence of a network of communication or interaction. Hence, an observer might see what patterns of transaction are developing among and within various categories of people. Thus, he might determine or estimate whether or not the transactions within a given social stratum are increasing relative to transactions across strata lines; income, occupational, national, or racial lines might be considered. Another guide to assessing the changing salience of social units is to consider what a major future development affecting the social system under consideration may be and then consider how it may affect various categories of people. For

example, assuming more extensive and efficient mass transportation, one would consider how that might differentially affect people who vary in age, residential location, or occupation. If there is reason to see large differences in effects, it is reasonable to expect that the criteria used in differentiating who will receive what effects will become a basis for the increasing salience of social unit identification based upon that criteria. Finally, changes in the relative proportions of persons in various categories is likely to make the categories more visible and more salient bases for identification. For example, changes in the distribution of people by age or ethnicity within a given social system will make those criteria more visible to the participants. Changes in the proportions might come about from changes in the rates of migration, births, deaths, and for some criteria, conversions and achievements.

B. On increasing the range of units considered.

Here, I wish to note some of the ways in which a relatively comprehensive set of social units can be brought to mind for consideration. Suppose that a social unit is recognized, either because of the clear assertions of the participants or by the insight of the social analyst. With this unit in mind, one can begin to review possible others. We return to the earlier suggestion that social groups define themselves by reference to other groups. This process can be illustrated from any social system. A relatively extreme and explicit case is the attempt by the Nazis to define what was German partly by defining what was Jewish; to attack the cosmopolite, capitalist, communist Jews was to glorify the traditional and provincial, under the leadership of the national socialist party, as truly German. In this, as in many other cases, one can select different characteristics for

one's own group and attribute some other set of characteristics to a particular other group. Where the conceptualization requires a dichotomy, then many characteristics are forced into one or another camp. For example, if to be aggressive is masculine, then to be non-assertive is feminine. As these examples suggest, definitions may involve the imposition or the attempted imposition of a definition of two groups by one of them and this may or may not be accepted by the other.

Taking any social unit as a focus provides a basis for conceiving of many other units. Bringing to mind a full range of social units is facilitated by considering the variety of ways in which other groups might be related to the focal social unit. Conflict, of course, is one important way. This means thinking of the other sets of people who under plausible circumstances could find some of their objectives incompatible with those of the focal unit. Where the focal unit has itself designated its adversaries, the "discovery" of other units in conflict is facilitated. In that case, too, the characteristics used to define the other units are significantly affected by the focal unit's characterization of itself. The adversary unit is likely to mirror that characterization by saying it is not any different, by attributing the opposite to the focal unit, or by disagreeing with the evaluations of the focal unit. For example, in 1941 the Nazis attacked Russia and regarded the enemy as lower people. The Russians then defined themselves in terms of their nationality and their regime as representative of their nationality and considered the enemy to be Germans who as a people were condemned.

In thinking about the future, we would like to consider which social units might be in a conflict relationship before the stage

of awareness is attained. This is difficult. At this time, all I can suggest is that the social analyst try to imagine what such other units might be. For example, suppose the focal unit is college students. Other social units in possibly conflicting relationships then might be any or all of the following: college teachers, college administrators, parents of college students, age-peers who are not in college, parents of age-peers not in college, recent college graduates, or non-college graduates in the early stages of their careers. The issues in contention may be financing college education, access to certain kinds of jobs, relative prestige, or adherence to certain kinds of life-styles. If college students is further defined in terms of age, race, sex, political or social values, or cultural patterns, other possible conflicting social units may be hypothesized. The point is that if one has reason to believe that this social unit will take on more social significance, then it is likely that some of the other social units in conflict with it will also.

In addition to conflicting relations, there may be exchange ones. Thinking in this way can help conjure up other social units or ostensibly similar ones but which are defined somewhat differently. Thus, consider college students as a focal unit again. Other social units may be middle-aged persons vicariously enjoying (and therefore in some measure supporting) the radicalism or liberty of the youth, or employers wanting persons with the skills acquired in college, or teachers who may be trading grades, credentials, ideas, information, or access to certain jobs in exchange for deference, appreciative attention, intellectual stimulation, immortality, or wages.

The third kind of relationship worth noting is the cooperative one. Again, the idea is to take the focal unit and see what other

units will take on importance. Thinking of cooperative relations means to consider what social units may be coalition partners or allies trying to attain a common goal with the focal unit. This should bring to mind another way of dividing up the social system. Taking college students as a focal unit again, one might reconsider some of the previously mentioned social units and note how they would be re-defined and characterized differently in this relationship. For example, teachers would still be an important social unit, now as collaborators in attaining knowledge or as allies in challenging the administrators. But additional social units may take on new possible significance; for example, college students in other countries, youth in the army, youth in the factories, radical blacks, establishment liberals, or women's liberation advocates. In these cases, the common goal may be more equality in decision-making within hierarchically arranged organizations or it may be more diverse ways of arranging people's personal lives.

These examples should suggest the range of social units which might participate in societal systems. They should also indicate how the characterization of the focal unit alters as other social units in interaction with it emerge. Clearly, also, the illustrative focal unit "college students" is too gross for certain kinds of analysis; it is better to be explicit about the segment of the social unit which is the analytic focus--not to implicitly use a part to represent the whole.

## II

### BASIC SOCIAL PROCESSES

We turn now to an overview of the basic social processes through which social change occurs, and equilibrium is maintained. The emphasis here is upon social processes in which the actors are social units within the social system which is the major subject of study. Some processes pertaining to the social system as a totality will also be considered but not in as much detail. In this section I will not try to specify what the outcome of every social process will be under every conceivable set of conditions for all social systems. That effort would be patently foolish. What I will try to do in this section is to provide an inventory of major social processes. This should serve as a guide to consider what kinds of changes could occur in the future. It should help enlarge the range of possible consequences of any particular initial new development, event, or trend. In discussing the processes, I shall also suggest the underlying conditions of each, their modes of expression or actualization, and their possible outcomes or developments. Although each is discussed separately, they all may be occurring simultaneously in reality.

#### A. Social interaction between units.

Here, I am concerned with social interaction processes--ones in which the interacting units take each other into account in the pursuit of their objectives. In discussing social units, at this point I will not try to develop the distinction and the implications of distinguishing between the spokesmen for a social unit and the constituents within the unit.

1. Cooperation. The basic condition for cooperation is the shared belief by two or more parties that they have a common objective or goal. The degree to which the goal is common varies. At one extreme, insofar as each party attains its goal, so will the other; this means the greatest degree of mutual dependence in the attainment of the goal. In such cases, the parties share some wider collective identity and their goal is the advancement or survival of that larger collectivity; for example, groups in the U.S. may have the common goal of advancing the relative prestige of the U.S. or groups in a factory may have the common goal of not having the factory close down. At the other extreme of a common goal, each party can approach its goal more efficiently or more quickly if the other side is doing so, but the attainment of its own goal is not dependent upon the other's attaining it also. For example, a number of scientists or scientific institutes may have the common goal to develop a medical treatment for an illness. The structure of their activities may be such that they believe that the attainment of the goal would be facilitated by mutual assistance, but not necessarily dependent upon it.

Given the conditions for a cooperative relationship, the process is basically joint action by the social units involved. The joint action varies in the degree to which it is coordinated. If the action were completely independent and unconsciously joint, we would consider this more a matter of symbiosis than of cooperation. For cooperation to be occurring, the parties must be aware of acting in a way that helps the other party as well as itself in the attainment of their common goal. The action may be very heavily inter-twined or it may be conducted with little attempt at meshing.

The primary dimension along which the outcomes of cooperative processes may be considered is the degree to which the cooperating parties believe they have attained their objectives. The content of the outcome depends upon the content of the goal. There are some other aspects of the outcome which should also be considered. Does the way in which the cooperation is conducted and the degree of success in attaining the objective make future cooperative action more or less likely? How do the cooperating parties jointly adapt to the social and non-social environment in which they were seeking their objectives?

2. Exchange. The second major process of social interaction to be considered here is social exchange. This involves the trading between two parties of goods, services, deference or any other social or non-social matter which can be gratifying to the receiving party. Each unit's action is contingent upon the rewarding actions of the other. Exchange is based upon complementarity. Two parties must differ in their evaluations of possible matters to be exchanged or have differing amounts and needs for the matters. Given such differences, it may be possible for two parties to trade with each other and for both to believe they are better off after the trade than they were before. Social exchange should be recognized as a pervasive form of social interaction. Social units generally do have sufficient variations in resources and in values that some trading is possible. Deference is often available to be given in exchange for other benefits and is often readily accepted.

One important dimension in carrying out social exchange is the degree to which the terms of trade are explicit and the process is

institutionalized. In economic exchange, in a money market, the terms of the exchange are usually precise and explicit and maintained by third parties as well as the shared expectations of the participants. In non-economic social exchange, the terms are usually not so clear--what is a fair exchange and the time for completing the transaction are not specified. Another aspect of exchange relationships is the sense of equity or exploitation each side feels. Maintaining what one side regards as an unfair exchange requires domination. This is how an exchange relationship becomes a conflicting one.

Three kinds of outcomes of exchange processes deserve special attention. First, to the extent each party benefits from the exchange, there tends to be an increment in their sense of well being. Second, partly as a result of this outcome, the trading partners are drawn together in bonds of mutual dependence. Finally, as the process continues, each social unit is likely to become more specialized in whatever it is exchanging with the other. Such specialization also is the basis of differentiation and decrease in consensus. A result may well be an increase in the conditions underlying social conflict. This may arise from an increase in value dissensus or in contention over power differences if deference, submission, or obedience is being exchanged for some other benefit.

3. Conflict. A conflict relationship exists when two or more social units (or their spokesmen) believe they have incompatible objectives. This relationship arises from two kinds of conditions. In one, the parties want the same thing and the context is such that as one gets more of it, the other side gets less. The other condition underlying a conflict is when parties want different things--

but they want it for each other. Thus, when two parties differ in religious or political values and one feels morally outraged that the other side does not share the same values, it may try to impose its values upon the other. This latter kind of conflict is based upon dissensus; the former is based upon consensus.

The dimension of conflict expression which is of most interest is the degree of coercion and particularly violence which is used. Coercion can vary in scope and intensity and between threat and actualization. It is also useful to consider non-coercive ways in which parties seek to gain conflicting objectives. Three other modes will be distinguished. One is persuasion: a party tries to alter the values or priorities of the other side, often by appeal to some higher values. Or, the parties may seek third party intervention and an adjudication of the conflict. Finally, either by expanding the number of issues in contention or fractionating the issue in contention into sub-issues, the parties may bargain with each other; the conflict relationship has then shifted to an exchange relationship.

Although an underlying conflict relationship may persist, any given conflict process may be analyzed in terms of its development, course, termination and outcome. The major dimension along which the outcomes may be considered is the degree to which there has been a change in the status quo ante. By withdrawal, counter-threat, or stalemate, the parties may return to their respective positions before the conflict became manifest. The only change then is what they have learned of themselves and the other side in their attempts. If the outcome is a change from the status quo ante, it may be of two

basic types. First, there may be conversion or reconciliation. One party converts another to its values or both parties find a higher level of common interest. The second major type of change has to do with the imposition of one side's wishes upon the other or some degree of compromise.

In actuality, all social processes are going on at the same time. The various ways of expressing each process also occur simultaneously. Distinguishing them, however, should make an observer attend to more possibilities. For example, in the American black-white conflict, each side attempts to gain its objectives by non-coercive as well as by coercive means. Among the non-coercive means, persuasion is of special interest because its presence and its implications for conflict outcomes is relatively neglected. Spokesmen for various social groups involved in the conflict urge their adversaries to change values and priorities. The outcome, at any given time, may involve not only compromise based upon a balance of coercive strength, but also some conversion and reconciliation. In the case of the black-white conflict, both may occur to varying degrees for different segments of the relevant social categories.

B. Inter-Unit Reactions.

The processes discussed thus far--conflict, exchange, and cooperation--all entail social interaction; there is an emphasis upon interdependence and mutual anticipation as well as responses. In this section on processes, attention is still directed at processes in which social units affect each other, but mutuality of response

and anticipation is not necessary. The social units are not seeking objectives by, from, or for the other units. These processes also refer to aggregates not acting as organized social groups.

1. Competition. In competition, the social units seek to attain some valued resources, services, or positions; these objectives are incompatible in the sense that both units cannot move toward them simultaneously. Unlike conflict, however, this incompatability need not be recognized and the other side does not control the objectives. That is, the objectives are sought from the social or non-social environment of the social units in competition. It is true, however, that by obtaining the sought for objectives from a third party, they may be unavailable to the other party in competition and threaten the viability, power, or well-being of the other party. For competition to exist then, two social units must be distinguished from each other and from an environment, the social units must be seeking something from that environment, and what is being sought must be limited.

Two related dimensions of competition deserve mentioning. First, competition may be more or less impersonal and unconscious. The actors in social competition may be competing with little awareness of the other or the awareness may be great, in which case rivalry and even large components of conflict are generally involved. The other dimension deserving notice is the degree to which the competition is regulated. There may be clear and explicit rules and social structures within which the competition is conducted. These social constraints are themselves constructed and maintained by the participants in competition. The rules may be the outcome of previous conflicting, cooperative, and exchange processes.

One dimension of the possible outcomes of competitive processes is similar to that from conflicting processes: the degree to which one unit is subordinated or weakened relative to another. Another dimension to consider is the degree to which the competing units become similar to each other. Exchange processes tend to lead to specialization of the trading units. Competition may lead to more similarities, in at least some regards, if only two or a few units are competing. If many units are competing, differentiation may occur. A good example of these assertions may be found in the political system. Where two political parties are competing to reach the same electorate, they are careful not to diverge too far apart in the policies they urge. In a multi-party system, each party seeks to differentiate itself from the others to hold its core members.

2. Reference. This process is difficult to name in any conventional manner. The idea is that a social unit may affect or influence another without intending to do so. As far as the intentions or objectives of each is concerned, the social units simply co-exist. But they serve as models, examples, and references to each other. One may become more like the other by assimilating some aspects of the other's patterns of thought or conduct. Assimilation is likely to be mutual, even if not equal. Reference processes need not lead only to greater similarity. Social units, referring themselves to other units, may seek to distinguish themselves, avoid the errors of the others, or otherwise be, act, or feel, contrary to the others. There is an interesting paradox here. In copying another social unit, a group may accentuate its differences from the other group. Thus, in copying militant tactics, nationalism, or commitment to ascriptive statuses of ethnicity, differences between groups may be increased. One other

kind of outcome of the referencing process deserves attention. The other social unit can serve as a standard of judgment by which the focal unit can assess the fairness of its circumstances. The focal unit may believe itself to be relatively deprived or relatively well off, depending upon the group chosen for reference.

The conditions for this process are omnipresent. All that is necessary is that the focal unit, either an individual or a collectivity, perceive some other identifiable category or collectivity of people. The more social interaction there is between the units, the greater is the opportunity for reference processes. Depending upon the relative importance of the various interaction processes, diffusion, assimilation, contrasting processes will be more or less likely. Thus, if the units are in a conflict relationship, assimilation is less likely to be occurring as extensively as if the units are in a cooperative relationship.

3. Adaptation. This final major process to be discussed is adaptation. As the term is used here, it does not refer to genetic changes in humans resulting from any selective process. Rather, the reference is to the modifying of a social unit in relationship to its social or non-social environment. This can take many forms. One dimension is the change in the unit so that it can alter the environment to make it more suitable and supportive of the unit's own goals. Another dimension is the degree to which there is consciousness of the attempts to alter the unit or its environment in order to maximize the goals sought. At one extreme, the adaptation may not entail any consciously directed collective effort. Rather, members of an

aggregation may individually respond to a set of circumstances and be altered because the circumstances are changed. For example, increased wealth in a given category of people may make possible greater mobility, longer ranged planning, or minimization of concerns about economic security, depending upon the relative change and the absolute amount attained. At the other extreme, there may be quite conscious deliberative choices made about how to adapt to changed environmental circumstances.

Variations in adaptation should also be considered in terms of the circumstances to which the unit is adapting. They can vary in the degree to which they are modifiable given the capacities of the focal unit. Insofar as the circumstances are other social units or other aspects of the focal unit itself, some degree of mutual adaptation is likely.

The outcome of adaptive processes are alternations in the values, priorities, or structural arrangements of the unit itself.

C. Immanent Processes of the Unit.

In this final set of processes, we will be considering those which pertain to the social unit as a relatively independent system. That is, the processes are those which occur within the unit rather than between the unit and another. Actually, any social unit is also made up of sub-units and those sub-units are interacting; therefore, the processes being considered now might seem to be explicable in terms of the previously discussed processes. This is true only to a limited degree. Some processes do pertain to a social unit as a single entity and they will be so discussed here. These processes should not

be regarded as social trends, describing some general transformation. Rather, like any process, whether or not they occur, how they are manifested, and what their outcomes will be all depends upon the conditions of the social unit being analyzed.

1. Elaboration. The creativeness, innovation, and search for novelty of people are manifested in the elaboration process. Whatever ideas or artifacts there may be in the social unit, they are subject to further differentiation, elaboration, and re-combination. Thus, in science and technology, there can be exponential increases as more elements exist to be combined into additional ideas and inventions. The elaborative thrust may be concentrated in one or another sphere in different social units, depending upon the values and resources available. In any case, in each sphere there are likely to be specialists whose energies and careers are largely committed to the elaboration of the existing ideas are artifacts. This is the case in the arts, sciences, politics, and even social organization.

2. Formalization. Another fundamental immanent social process is formalization. I am also including institutionalization and routinization here. This refers to the way in which whatever patterns exist in the social unit take on an expected quality, and even in time, take on a moral quality. Deviations from the patterns then become immoral. Furthermore, over time, the patterns become more specific and explicit and more elaborated. Within the social unit some persons are relative beneficiaries of the patterns and they will strive to maintain, perpetuate, enforce and extend them.

3. Stratification. The third immanent process to be considered is stratification. This refers to several elements. People rank each

other in terms of criteria which they agree are valuable and desirable. They acknowledge prestige, status, and deference to each other at least partly in terms of the degree to which people possess the desired attributes or qualities. Since there are many dimensions within any social unit by which people rank each other, the degree to which persons have the same rank position in several dimensions is problematic. There may be more or less rank consistency or equilibrium in a given social system. The stratification process includes the movement toward equilibrium and constancy. People are motivated to raise themselves especially in the ranks in which they are low relative to their other ranks. Furthermore, people have resources from their relatively higher rankings to raise their relatively lower ones.

### III

#### CONDITIONS

How the processes operate and what their outcomes will be depends upon the conditions in which they occur. In this section I will outline some of the basic dimensions of the conditions relevant to the processes previously outlined. Ideally, one would like to be able to state under what circumstances particular processes would be operative and with what outcome. This cannot be done in the present stage of knowledge. Nevertheless, attention should be directed at the conditions affecting the course of social processes to keep one sensitive to the variations in the processes and their outcomes. In the next section of this paper, we will consider some of the possible relations between conditions and processes; in this section, we will only be mapping out the especially relevant dimensions of the pertinent conditions.

This discussion will be organized in terms of the units as a focus of analysis and in relatively substantive and concrete references. This means that a variety of aspects of the conditions will be implicit and not systematically presented. It might be worthwhile to briefly refer to some of these aspects before going to discuss the more substantive dimensions pertaining to the units. As the discussion in the previous sections indicated, conditions pertaining to the processes discussed have both a subjective and an objective aspect. The subjective aspects of the conditions may be divided into three types: cognitive, evaluative, and affective. Among the cognitive types are those pertaining to beliefs such as expectations about future states of the persons in the unit or beliefs about the degree of inter-dependence between units. Evaluations include values, goals, norms about conduct,

and priorities. Affect includes feelings of hostility, fear, love, and affection. The objective aspects of the conditions of interest include non-social as well as social conditions.

Although the dimensions of the conditions will be discussed as static states of the unit or the relations between units, one should keep in mind that the units are not really static. At the least, one should also consider the state of the conditions at some prior time and note the rate of change from the past to the present. Attention to such changes would suggest to the observer what some future changes may be. Moreover, the changes are an important basis for the unit members' own expectations and sense of failure or success. Evaluations are dependent upon some comparison or reference group and the members' own past can serve as such.

A. Conditions of a social unit.

We will begin by outlining dimensions of the conditions which characterize a social unit as an entity. It should be kept in mind that any given unit may also be analyzed in terms of the many social units which make it up and of the larger social units of which it is a part or to which it is otherwise related.

1. State of elaboration. In considering the state of elaboration of a social unit, we are concerned with the degree to which there is specialization or differentiation. This is aside from institutionalization and stratification discussed below. I am including under elaboration the state of technology, science, art, and other aspects of culture. What is needed in a more developed paradigm, is a typology of cultural orientations and organizational forms. That is, we need to construct a typology of structures which is relevant for the analysis of the

processes previously outlined. This would mean considering the rules and organizational structures within which the processes of conflict, exchange, cooperation, competition, reference, adaptation, elaboration, formalization, and stratification occur. The typologies should also be related to the major themes and functions of the social unit. However, in this paper I am not trying to suggest any such typology.

2. State of institutionalization. Here we are concerned with the degree to which patterns of conduct are formalized and institutionalized. Included here is the extent of consensus within the social unit and the degree to which the elements of consensus are internalized. In addition, the degree to which the patterns of conduct and the social organization in general are supported and maintained by positive and negative sanctions and special agents of social control. These aspects of institutionalization are related to the state of elaboration and of stratification.

3. State of stratification. In considering the state of stratification of the members of any social unit, one might begin by considering the major dimensions along which the unit members can be ranked. Following and modifying Weber, I stress three major dimensions: class, power, and status. Class refers to the economic or material resources possessed by persons in a social unit. This might be measured in terms of personal or family income, total economic resources, life-time chances in the economic markets, or in other ways. Power refers to the likelihood of being able to control others and also to the ability to be free of other persons' power. Thus, various civil and juridical, as well as political rights are involved here. Status refers to any criterion by which people evaluate and therefore rank each other. Age,

sex, ethnicity, "race," occupation, life styles, moral character, religiosity, physical beauty or strength, or any personality trait might be the basis for ranking.

The state of stratification has several aspects. First, one needs to consider the degree of stratification for any given measure of a single dimension. One aspect is the degree to which people differ along a dimension; in other words, what the range of the dimension is. If the range is small, the members are more equal than if the range is large. Related to this aspect is the general distribution of persons in the social unit along a given dimension. Equality in this aspect, e.g., is the degree to which the upper fifth, or quarter, or some other proportion of the unit's members have a disproportionate amount of the unit's aggregate wealth or other valued attribute. A third major aspect of any dimension is the degree of mobility persons can experience along the dimension. Ranks may be inherited at birth. In such ascribed statuses, there can be no mobility in a person's lifetime, nor between generations. Positions along a dimension, however, may also be open to the achievement and the good or ill fortune of persons striving to raise or maintain themselves, their children, or others with whom they feel a collective identity. Equality of opportunity is greater insofar as movement between ranks is independent of one's own or one's parental rank position.

The state of stratification is also dependent upon the relations among the various dimensions. First, since there are an infinite number of possible ways to rank people, one issue is how salient is one or another dimension. Here the analyst must recognize the necessity of specifying the criterion by which he assesses importance. This may be the sense of well being of the society members, the effects upon the

direction in which the unit collectively acts, or the relevance for some social theory. In any case, equality may be high in one dimension and low in another; in order to characterize the social unit, one must assess the relative salience of the different dimensions. There is another important implication of the fact that people are ranked along many different dimensions. That is the degree to which people are ranked similarly along different dimensions; in other words, what is the degree of rank equilibrium or status consistency. There is a tendency, in any social unit, for consistency in the rankings along various dimensions, but it can never be perfect. Presumably, the more inconsistency, the more equality there is in the social unit; then persons who are low on some dimensions are high in some others.

There are some apparently contradictory implications of the degree of rank consistency for social conflict. Under conditions of high crystallization, conflicts between those who are consistently high and those who are consistently low might be expected to be more intense than when persons are high on some dimensions and low on others. On the other hand, it is also argued and there is some evidence that persons or groups who are status inconsistent are more assertive and demanding of adversary groups than are those who are even consistently low. The specification of conditions and stages in the course of conflict are necessary to reconcile these contradictory implications.

4. Size and resources. The overall size of a social unit as measured by the number of persons in it as well as its demographic composition should also be taken into account. In addition, the level of resources available in the social unit must be considered. How much of the resources desired by the participants are available to them collectively and separately has important consequences for the functioning of each social process.

B. Between units.

Insofar as two or more units are constituent parts of a larger unit the conditions pertaining to a social unit as an entity pertain to the relations between the constituent units. Thus, the extent and nature of the shared understandings, institutionalized patterns of conduct, and the elaboration of procedures and controls for transactions between the units are pertinent to the operation of processes between units. Nevertheless, the conditions relevant to the operations of social processes between two or more social units have some dimensions which are different from those already considered. It is those which are of particular interest here.

1. Balance of interests. One needs to examine the whole set of conditions underlying the major social interactional processes. The extent to which there are common, complementary, and conflicting interests and their mixture should be noted.

2. Relative resources. Here, it is important to note the relative size, resources, force, and other matters of value to the members of each social unit.

3. Mutual identification. Related to, but distinguishable from, the previous considerations is the nature of the identifications the members of each social unit make of each other. This has an affective aspect; viz, the hostility or enmity between them. There are also cognitive and evaluative aspects as indicated in the discussion of the nature and bases of social units in the first section of the paper.

IV

CONDITIONS AND PROCESSES

It is impossible to specify the way in which each process operates and with what outcomes under every set of conditions. Neither our social theories nor our stockpile of substantive information are adequate to begin such a task. If they were, the task would be interminable--there are too many possible sets of conditions. What is possible may be more helpful. I will suggest some of the ways in which changes in conditions affect how the processes operate and their new outcomes. The objective is to suggest possible implications for future changes and how one set of conditions arise from others. The concern is with the sources and directions of change. I do not assume any necessary single direction of total societal change. The state of any social unit at any given time is the product of large number of smaller changes, many of which are contradictory. Paradoxes, dilemmas, and cyclical changes should be noted as well as overall, sweeping grand movements.

A. Sequence of changes.

Since the outcome of any process depends upon the conditions in which it is occurring, one can expect an ongoing course of change as the outcome means that the conditions have altered. This ongoing series of changes may be cyclical, cumulative, or even self-limiting. The interplay among various processes complicates the matter immeasurably, and in this section I will discuss the course of development of a single process. I will focus upon the conditions directly affecting it and its possible outcomes and hence the new conditions. This should help in writing scenarios of the future. I will not attempt a systematic overview of possible sequences of change. What follows are briefly stated illustrative sequences.

1. Differentiation. As a social unit becomes more differentiated and more elaborated, the various members have increasingly different experiences and associated ideas. Consequently, there is a decrease in consensus within the social unit. This decrease in consensus may limit the growth of the social unit or reduce the ability of the members to maintain order. Such developments may then inhibit further differentiation. Other courses of development are also possible. Further differentiation may occur as specialists provide new bases of consensus. This might take the form of persons striving to create new collective symbols. Specialists might also arise who serve to solve the problems confronting members of the social unit as a result of the decrease in consensus. This is one way of viewing developments in the American society such as the growth of specialists in popular culture and mass communications.

2. Conflict. Depending upon the course of a social conflict and consequently its outcome, it may increase in intensity and violence and exacerbate differences between the units in conflict or it may tend to reduce the differences or it may lead to a new pattern of regulated inter-unit conflict heavily mixed with exchange and cooperative relations. Let us briefly consider how some of these sequences may occur.

Suppose persons in a subordinated group becoming aware of their shared subordination, organize to redress their grievances. Such organization may be channeled in various directions; but it usually and minimally involves drawing attention to and emphasizing grievances being imposed by the adversary. In the first instance, then, differences between the superordinate and subordinated group would increase at least in the awareness of both sides. The conflict may very well increase in intensity and coercive means; at issue may be

not only a struggle over an agreed upon goal--authority--but also a value conflict. Other courses of development, however, may follow from the organization of the subordinated group. The very organization of the subordinated may increase their relative power. This increase in equality may well lessen the objective conditions of deprivation. With increased equality, the subordinated group may find itself more respected by the superordinate. Under these conditions, mutual assimilation may occur and the value differences between the two groups may well decrease. Relations between different economic classes, ethnic groups, age categories, and even the two sexes can be reflected upon in these terms.

B. Changed conditions

In the previous discussion, we looked at how the same process might change in form and outcome as the conditions it helps create are altered. Now we will discuss how changed conditions may affect a variety of processes. Again, the processes may reinforce each other so that the conditions continue to change in the same direction, the direction of change is modified, or this particular change is halted.

Consider some of the consequences of increasing affluence. In the case of a society, imagine that a wide variety of personal resources are increasing: education, income, and time from employed work. Even without any changes in the relative distribution of these resources, if all constituent social units are getting more of such resources, the processes of interaction between them will be modified. First, let us examine possible effects upon social conflict. The subjected or subordinated group, as its resources increase, may have several kinds of responses. One possibility is that the increases simply raise

expectations which are unmet. Expectations may rise faster than fulfillment for several reasons. First, the members of the group might well have anticipated greater equality with the superordinates and if they find that despite their own increases, they are not relatively better off, their expectations are frustrated. Increased affluence may also bring awareness of possibilities that the members of the subordinated group had not previously had; their modest increases give them the chance to see what they are still denied. It is also likely that expectations for increasing affluence rise more steadily and perhaps more steeply than actual increases; consequently, there is an increased sense of deprivation. In short, increased affluence may deepen the bases for social conflict. Related to this possibility is that acquisition of sought-for resources are simply disappointing once attained.

Two other kinds of consequences of affluence for social conflict deserve attention. First, whatever the sentiments of grievance may be, the pressure for conflict-based change requires that the subordinated group feel that it can effectively make claims and this belief is at least partly based upon social reality. Hence, increased affluence may further the application of coercive means against the superordinate; the subjected group has increased resources and strength to further its claims and therefore, will do so.

Another possible consequence of increased affluence is quite different. The members of the subordinate category, or some of them, may feel that the increases they are receiving are fulfilling their expectations in terms of the larger system of exchange and cooperation in which they are related to the superordinates. They may increasingly

feel that they are engaged in a fair and legitimate exchange relationship. In addition, the absolute increase the lower groups have received can decrease the differences in life style and outlook between the social groups. Although the relative resources are unchanged, the disparity in life style can be altered. For example, the gap between literacy and illiteracy is greater than between completing eight and sixteen years of schooling. The gap between persons with one set of clothes and persons with ten is greater than between persons with two sets and those with twenty. Increases in affluence, then, can strengthen exchange and cooperative relations and increase the degree of consensus.

C. Other linkages of change.

Changes in one part of a social unit, or in other units with which it has some relations, or in its environment have a series of inter-connected effects. Efforts to bring about consistency in one area in response to one change will likely induce needs for change in another direction. It should not be expected, however, that equilibrium or consistency is ever total. A great deal of looseness within any social system is possible. The independence of changes in one sphere with those in another must be recognized as well as their mutual dependence.

This line of reasoning assumes that in a variety of spheres, relatively independent developments can occur. Thus, one of the reasons for the interest in technology in thinking about the future is the recognition that technological elaboration depends upon the previously existing technologies and that the more components that exist, more combinations are possible and hence, increasing elaboration is likely unless very radical social transformations intervene. More generally, the social processes previously discussed suggest courses

of development and hence are suggestive for constructing scenarios. In this final section of the paper, I want to discuss one other source of change in societies. It also is suggestive for writing scenarios and the discussion of it should illustrate some of the independence and dependence of changes in different parts of a social unit.

One of the inherent features of any large-scale, enduring social unit is the incorporation of new members as other members leave. Ultimately, this change over is related to the human life cycle. In the case of society as a social unit, this is most obviously the case. It has been frequently noted that human societies are constantly being invaded by the hordes of infants who need to be socialized; this is frequently viewed as simply the inculcation of the parental culture into the children and the persistence of the parental culture. It is also possible, indeed inevitable, that the interaction between children and parents yield some outcomes not anticipated nor planned by either. As children grow older, moreover, they begin to have their own set of experiences, of which interacting with their parents is only one. The set of conditions they experience necessarily is different from their parents'. From these experiences their own orientations develop. One issue of importance in writing scenarios is the possible persistence of such orientations if they are developed at particularly crucial stages of the life cycle. Thus, there is evidence that the experiences people have as they reach political maturity have lasting effects upon their political outlooks. For example, we speak of the Depression generation--those whose political and economic experiences are dominated by the American Depression of the 1930's. Ties to the Democratic party and general concerns about security may be partly attributable to the lasting effect of those experiences.

The boundaries of a political generation are difficult to fix; we may use periods bounded by numerical convenience, as we speak of the generation of the 1940's or 1950's compared to the 1960's. These might be characterized by major events such as World War II, the Cold War and McCarthyism, and the Civil-Rights Movement and Viet-Nam. People probably do operate with major metaphors and orientations developed in one set of circumstances and carried over into new circumstances. This may accentuate disagreements between political generations. It is not easy to assert in advance, however, what the basic, persisting orientation will be which emerges from a given set of experiences. Consider the generation which has been involved in the civil rights movement, the various more recent liberation movements, the campus disturbances, and the opposition to the Viet Nam war. What are the peculiar orientations of the generation now in their 20's?

One the basis of different bits of evidence, one might argue that this new generation is radical, pacifist, privatized, activist, anti-war, anti-authoritarian, or withdrawn into libertine pleasures. It would be worth trying to sort out systematically what the dominant orientations of this generation are and then consider how they might affect other processes under a variety of possible conditions.

Survey data indicate that opposition to the Viet Nam War is not any more common among youth than among other age groups. There is, however, greater support and tolerance of expressions of protest and opposition to the war. Some of this may be an expression of solidarity with ones age-mates. What is more likely, however, is an orientation of more direct expressiveness and of tolerance of other persons' expressiveness. The general thrust might well be an emphasis upon

individual and group autonomy coupled with relatively direct action toward getting it. This might mean readiness to use coercion but also readiness to withdraw into simply carrying out ones' own way of life.

There are some possible contradictory implications of these orientations, but the major first-order implications might be support for policies and societal choices which promise greater pluralism in the institutional arrangements. Repression, although initially provoked, would become less tolerable as a means of social control as this generation becomes politically dominant.

## CONCLUSIONS

The paradigm presented here is not exhaustive and the presentation is sketchy. Nevertheless, I hope that by outlining a set of major processes and conditions, a helpful guide in constructing and testing scenarios has been created. To briefly review the paradigm, how social units themselves might be considered problematic was discussed. Then three kinds of processes were discussed: interaction, inter-unit, and immanent. Among each of these major types of processes, three varieties were distinguished. Among the interaction processes are cooperation, exchange, and conflict. Among the inter-unit processes are competition, reference, and adaptation. Elaboration, formalization, and stratification were discussed among the immanent processes. The conditions affecting the way in which these processes are manifested and what the outcomes are were considered in terms of unit and inter-unit characteristics. Among the unit conditions, the following were distinguished: state of elaboration, institutionalization, stratification, and size and level of resources. Inter-unit conditions were briefly discussed in terms of the balance of interests, relative resources, and mutual identification of the units. Finally some of the ways in which the processes and their outcomes are affected under different conditions were discussed.

The usefulness of this paradigm is not that it provides any mechanical means of grinding out scenarios; rather, it should provoke and stimulate many lines of reasoning, given any particular insight. As the lines of reasoning extend out in several directions, the construction of plausible scenarios and of alternative futures should be facilitated. The choices among alternatives, as a line of reasoning is followed, should be more explicit. The assessment of the utility of the paradigm must await its application. The elaboration and refinement of the paradigm would follow such application and assessment.